



The Sources of Entrepreneurial Opportunities

perspectives on Individuals and Institutions

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Publication date:
2008

Document Version
Publisher's PDF, also known as Version of record

[Link to publication from Aalborg University](#)

Citation for published version (APA):
Fuduric, N. (2008). *The Sources of Entrepreneurial Opportunities: perspectives on Individuals and Institutions*. Institut for Samfundsudvikling og Planlægning, Aalborg Universitet.

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The Sources of Entrepreneurial Opportunities: Perspectives on Individuals and Institutions



No. 2008-7

ISSN 1397-3169-pdf
ISBN 978-87-91830-18-1-pdf

PUBLICATION SERIES
DEPARTMENT OF DEVELOPMENT AND PLANNING

The Sources of Entrepreneurial Opportunities: Perspectives on Individuals and Institutions

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Publication series 2008-7

ISSN 1397-3169-pdf

ISBN 978-87-91830-18-1-pdf

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The Sources of Entrepreneurial Opportunities: Perspectives on Individuals
and Institutions

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February 2008
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ABSTRACT

The Sources of Opportunities: Perspectives on Individuals and Institutions

This paper has five goals. The first is to offer a literature review on the sources of opportunities in the entrepreneurship process. The literature review shows that the theoretical and empirical contributions are quite fragmented and in need of a framework. The second goal is to explore the generally accepted view in the field that entrepreneurs can be described from a Schumpeterian or Kirznerian perspective. I propose that one entrepreneur has the opportunity to be both depending on which stage of the entrepreneurial process he is in and in what environmental context he finds himself in. The third and fourth goals are to delineate which individual and environmental factors provide the entrepreneur with opportunities by examining existing research. Finally, the fifth goal is to develop a framework including the individual and environmental factors affecting the discovery and exploitation of opportunities. This framework will be used to structure my empirical research in a post-socialist periphery.

Keywords: Entrepreneurship, Opportunity Discovery, Opportunity Exploitation

The Sources of Opportunities: Perspectives on Individuals and Institutions

None of us know all the potentialities that slumber in the spirit of the population, or all the ways in which that population can surprise us when there is the right interplay of events.

- Vaclav Havel

I. INTRODUCTION

No extensive empirical study on the sources of entrepreneurial opportunities included the individual, the environment and the individual's start-up activities in a post-socialist periphery. However, such layered approaches have been encouraged in theoretical studies of entrepreneurship. Bouchikhi (1993) claims that each approach taken separately has crucial weaknesses and neither the personality of the entrepreneur nor the structural characteristics of the environment illuminate the process. Thus, multi-leveled studies have been encouraged in research programs (Low & MacMillan, 1988). In my previous paper, I attempted to examine the different forms of entrepreneurship by using the interplay between individual personality traits and capabilities and the institutional environment.

The goal of this paper is to examine the ***sources of entrepreneurial opportunities*** from the perspective of individual and environmental factors. Since opportunities define how the entrepreneur behaves and what kinds of entrepreneurship are manifested, entrepreneurial opportunity discovery and exploitation are two integral parts of the entrepreneurial process.¹ The field of entrepreneurship has two general perspectives on entrepreneurial types and the sources of entrepreneurial opportunities: the Schumpeterian and the Kirznerian perspectives. The Schumpeterian entrepreneur is considered to be a creator of opportunities, finding his opportunities in innovative ways. This form of entrepreneurship has wide reaching social repercussions, specifically for increasing national output and job growth (GEM, 2006). The Kirznerian entrepreneur is considered to be a discoverer of opportunities which arise from market inequilibria. This form of entrepreneurship is considered to be non-novel and not a major contributor to national economic well-being.

The sources for Schumpeterian opportunities have been so well-studied that the field has a typology for them. Schumpeterian opportunities can be found in technological changes,

¹ According to Shane (2003) the entrepreneurial process entails: the existence, discovery, exploitation of an opportunity, then the acquisition of resources, the development of an entrepreneurial strategy, and the organizing process.

political/regulatory changes and socio-demographic changes (Schumpeter, 1934).²

Kirznerian opportunities, on the other hand, have no such typology generally accepted by the field because it is believed that they are idiosyncratic – occurring at any time or place (Shane, 2003). According to researchers, Kirznerian opportunities emerge because of market disequilibria created by errors or omissions that create surpluses and shortages.

Two questions regarding these generally accepted positions on the Kirznerian entrepreneur seem to stand out:

- 1) Are Kirznerian opportunities really that idiosyncratic or can they be mapped?
- 2) Does the Kirznerian entrepreneur only exhibit “alert” behavior or does he sometimes behave like a Schumpeterian and use creative impulses to influence economic shifts?

I hypothesize that the difficulty in identifying Kirznerian opportunities arises not because of its idiosyncratic nature but for two other reasons (maybe more?). The first reason is that we cannot capture the complexity of Kirznerian opportunities because we do not have a framework from which to observe them. The second reason could be because it is generally assumed that Kirznerian entrepreneurship is more mundane and offers less value to society (from a macro-economic but not from a development perspective). As a field, we do not have a clear understanding of the Kirznerian entrepreneur’s opportunity sources, his value to different levels of society and what interventions are needed to encourage this form of entrepreneurship even though it is the most common form practiced.

Why encourage a non-innovative, mundane form of entrepreneurship? The answer lies in the fact that a simpler, less resource intensive form of entrepreneurship has the ability to manifest in economically stagnating peripheral regions. Entrepreneurship in these areas of the world is often the only source of economic and social meaning available to the marginalized or the poor.

Based on what has been discussed in the previous paragraphs, this paper has five goals. The first is to offer a literature review on the sources of opportunities in the entrepreneurship process. The literature review shows that the theoretical and empirical contributions are quite fragmented and in need of a framework. The second goal is to explore the generally

² In my opinion, it is peculiar that industrial structure is missing as a source of Schumpeterian opportunities.

accepted view in the field that entrepreneurs can be described from a Schumpeterian or Kirznerian perspective. I propose that one entrepreneur has the opportunity to be both depending on which stage of the entrepreneurial process he is in and in what environmental context he finds himself in. The third and fourth goals are to delineate which individual and environmental factors provide the entrepreneur with opportunities by examining existing research. Finally, the fifth goal is develop a framework including the individual and environmental factors affecting the discovery and exploitation of opportunities. This framework will be used to structure my empirical research in a post-socialist periphery.

This paper is organized in the following manner. The next section is dedicated to definitions and an introduction to Schumpeterian and Kirznerian opportunity sources. Because a typology for Kirznerian opportunities does not exist, I express the need for the development of a framework. Section III develops the framework for individual characteristics that are the sources of opportunity. Section IV places the environmental characteristics in the framework which create sources of opportunity. Section V is the conclusion and here I will pull together the individual and environmental elements needed for researching the Kirznerian entrepreneur. The complete framework is presented as a guideline to be used in my empirical work. Before frameworks can be discussed, definitions need to be in place. Therefore, I begin the next section by defining the terms I most use: entrepreneurial opportunities, Schumpeterian (novel or innovative) and Kirznerian (non-novel) entrepreneurship.

II. DEFINITIONS

A. Entrepreneurial Opportunities

Entrepreneurship is an activity that involves the discovery, evaluation and exploitation of opportunities to introduce new goods and services, ways of organizing, markets, processes, and raw material through organizing efforts that previously had not existed (Shane & Venkataraman, 2000; Venkataraman, 1997). This definition borrowed from the above authors is one that I find compelling because they anchor entrepreneurial activity onto the concept of “opportunities”. They continue along this vein by stating that the field of entrepreneurship has the task of studying “the sources of opportunities, the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate and exploit them” (Shane & Venkataraman, 2000, p.218).

Shane (2003) describes an entrepreneurial opportunity as:

“...a situation in which a person can create a **new** means-end framework for recombining **resources** that the entrepreneur **believes** will yield a profit. (Page 16)

This definition of an entrepreneurial opportunity is useful in that entrepreneurial opportunities are about two things: something happening in the environment (resources) and something to do with the individual (creation, beliefs, recombination). Since opportunities are not always profitable the key word “believes” is well placed. With these definitions in place, it is now necessary to examine the research stream on entrepreneurial opportunities to see how often the individual and the environment have come together as a focus. Most studies of the business start-up process fall into one of three areas: 1) focusing on the individual entrepreneur 2) his environment or 3) the actual activities undertaken by the entrepreneur during the start-up process.

Table 1 shows the main streams of research in entrepreneurial opportunity recognition. This table serves as a literature review and helped me ascertain that an opportunity source typology is missing for the Kirznerian entrepreneur. The fourth column titled, “Level of Examination” shows whether the authors’ contribution falls under the level of the individual or the environment.

TABLE 1: Opportunity Literature Review

YEAR	AUTHOR	CONTRIBUTION	LEVEL OF EXAMINATION
1934	(Schumpeter)	Entrepreneurs create opportunity by disrupting the equilibrium in the marketplace.	Individual
1945	(Hayek)	The economic problem is not just how to allocate resources; it is a problem of utilization of knowledge. Knowledge is not given in totality to anyone.	Individual
1949	(von Mises)	Entrepreneurs & their search for opportunities are driven by a profit motive.	Individual
1973	(I. Kirzner)	Alertness, not just the possession of information helps one recognize & exploit opportunities.	Individual
1979	(Vesper)	Work experience, hobbies, networks, systematic search lead to opportunity recognition.	Individual & Environment
1985	(Drucker)	Opportunities are innovations that occur due to changes in industry structure, demand, outside events, demographics.	Environment
1985	(I. Kirzner)	Alertness aids opportunity recognition & exploitation; it “emerges into view at the precise moment when decisions have to be made.”	Individual
1988	(Bird & Jelinek)	Schemas, mental models, and opportunity recognition.	Individual
	(Katz & Gartner)	Entrepreneurial intention and	Individual

		recognition.	
1990	(Christensen & Peterson)	Along with market & technological knowledge, specific problems & social encounters are often a source of venture ideas.	Environment
1991	(Shaver & Scott)	Psychology of new venture creation.	Individual
1992	(C. Gaglio & Taub)	Pre-recognition stew of environmental, technological, social, economic, cultural, and personal forces lead opportunity recognition	Individual
1994	(Bhave)	External circumstances and/or desire to start business motivate a conscious search	Individual & Environment
1996	(Hamel & Prahalad)	Broad experience & the ability to learn & adapt should help individuals recognize opportunities.	Individual
1997	(Venkataraman)	Opportunity identification & opportunity recognition should be part of what distinguished entrepreneurship as its own. scholarly field.	Individual
	(C. Gaglio)	Detailed review & critique of opportunity recognition.	Literature Review
1997	(I. M. Kirzner)	A comparison of the Schumpeter & Kirzner view of the entrepreneur & opportunity	Literature Review
1999	(Timmons)	The role of experience in opportunity recognition	Individual
	(De Koning)	Initial ideas come from continuous information scanning without a specific objective.	Individual & Environment
2000	(Shane & Venkataraman)	Entrepreneurship should be concerned with the sources of opportunities and the individual.	Individual & Environment
	(Krueger)	The role of intention in opportunity development	Individual
2001	(Ireland, Hitt, & et.al.)	The differences between opportunity-seeking & advantage-seeking behavior.	Individual
	(C. M. Gaglio & Katz)	Alertness is the engine that drives opportunity recognition	Individual
2003	(Ardichvili, Cardozo, & Ray)	Theory building using personality traits, social networks, & prior knowledge as precursors to alertness	Individual
2004	(Sarasvathy, Venkataraman, Dew, & Velamuri, 2004)	Three views of entrepreneurial opportunity based on the market process: allocative, discovery, & creative	Individual & Environment
2007	(Casson & Wadeson)	Opportunity is an unexploited project which is perceived by an individual. Invokes the idea of rational action.	Individual

As table 1 portrays, the research has been rather fragmented about shedding light on the sources of opportunities. Most opportunity recognition research focuses on the individual and very few bring the individual and the environment together. In Shane's "General Theory of Entrepreneurship", he encourages researchers to focus their examinations of entrepreneurship on the nexus of the individual and the opportunity. This "nexus" is a complicated place. It is a place where the individual and his environment are in interaction. How they interact is dependent upon the resources the individual has at his disposal and the resources available in the environment. It is at this meeting place of many factors that entrepreneurial opportunities are either present or not.

B. Sources of Opportunities

If opportunities have such an integral role in entrepreneurship, where do they come from and what are their characteristics? Researchers have categorized the sources of entrepreneurial opportunity in many different ways: by discipline - psychology, sociology, economics, management, by level of analysis (micro, meso, macro), by the institutional landscape, by demand and supply (market) factors, and government policy. In each discipline two factors are continually in interaction: the individual and the environment. Joseph Schumpeter and Israel Kirzner have two perspectives on how this interaction occurs, what kind of entrepreneurship is created and what benefits are given to society. Schumpeter takes a creative viewpoint where opportunities offer the possibility of creating new means (frameworks) as well as new ends. These opportunities are new, innovative and have the capacity to shift economies, increase national output and employment. Kirzner sees opportunities as needing to be discovered because opportunities arise by existing market disequilibria. The prerequisite for this type of entrepreneurship is an alertness on the individual's part. The sources of opportunities from a Schumpeterian and Kirznerian perspective are evaluated in more detail in the next two subsections.

1. The Schumpeterian Opportunities

The innovative or novel entrepreneur was first classified by economist Joseph Schumpeter. He believed that entrepreneurial activity is the source of innovation in an economy. Hence, the special role of the entrepreneur is to catalyze economic growth by destroying established, outmoded ways of business. He coined the term, "creative destruction" to describe this process. In Schumpeter's view, the entrepreneur brings disequilibrium into a market, thereby opening up more entrepreneurial opportunities due to this shift. The literature has a general agreement that the sources of opportunities for this form of entrepreneurship are found in: technological changes, political/regulatory changes and

socio-demographic changes (Shane, 2003). Studies have shown that novel forms of entrepreneurship increase national output, support job growth, and shift whole industries into new technological frontiers (GEM, 2006). As exciting and innovative as this type of entrepreneurial action and outcome is, it only emerges in extremely rare situations. Many factors need to be in place: a transparent rule of law, a robust institutional environment, sophisticated information and communication technology, high levels of education, high levels of income, placement in large urban locations, diverse markets, developed industrial structures, to name just a few. Because of the large, visible, noisy impact of this form of entrepreneurship, it has also captured the attention of researchers and policy-makers, so much so, that another more mundane form of entrepreneurship is left under-researched – the Kirznerian form.

2. The Kirznerian View

The Kirznerian, or non-novel form of entrepreneurship comes from Isaac Kirzner's belief that opportunities are not created by special individuals but are readily available in society to anyone who has the "alertness" to recognize them. He believes that opportunities occur because the market is in a state of disequilibrium caused by faulty decision making frameworks, which in turn, create shortages and surpluses (I. M. Kirzner, 1997). It is in these shortages and surpluses where entrepreneurial opportunities can be found. Instead of being a creator of opportunities like the Schumpeterian entrepreneur, the Kirznerian entrepreneur is a discoverer of opportunities. Both types of entrepreneurship can be present at the same time. It is also known that in countries where the ratio of necessity entrepreneurs is higher than opportunity entrepreneurs, more often than not, structural problems exist in the economy, in policy and in the institutional environment (GEM, 2006).

Unlike the Schumpeterian entrepreneur, the field has no typology for the sources of opportunity for the Kirznerian entrepreneur. It is believed that the sources of opportunities for non-novel forms of entrepreneurship are too "idiosyncratic" to be captured (Shane, 2003). Some researchers even call Kirznerian entrepreneurship a "weak" form of entrepreneurship and Schumpeterian entrepreneurship a "strong" form of entrepreneurship (Venkataraman, 2004). To sum up the previous discussion, characteristics of the Schumpeterian and Kirznerian opportunities are presented in Table 1.

Table 2: Schumpeterian versus Kirznerian Opportunities

SCHUMPETERIAN OPPORTUNITIES	KIRZNERIAN OPPORTUNITIES
Disequilibrating	Equilibrating
Requires New Information	Does not require new information
Very Innovative	Less Innovative
Rare	Common
Involves Creation	Limited to Discovery

Source: Shane 2003

Since my goal is to understand the non-novel entrepreneur's behavior in his environmental context, I have a few questions regarding how Kirznerian opportunities are described by Shane in Table 1.

- 1) What does "not requiring new information" really mean? For whom is the information new or old? The national economy? The regional market? The entrepreneur himself? When information inspires profitable entrepreneurial actions, is it not "new"?
- 2) What does "less innovative" mean? From whose perspective? The core? The periphery? Is it innovative to create higher value outputs in resource poor regions?
- 3) If an opportunity is "common", then how can it be entrepreneurial? If the entrepreneur is experiencing profitability, then the opportunity was not really common because other people would be doing the same thing.
- 4) In the entrepreneurial process, is it possible that both the Schumpeterian and Kirznerian entrepreneurs have moments where they create opportunities and where they discover them?
- 5) In resource-poor peripheries, could the Kirznerian entrepreneur really be behaving like a Schumpeterian?

The answers to these questions do not exist however they encourage me to consider how I could examine the sources of Kirznerian opportunities so that a typology can be created. First, a framework is needed to structure my observations. Both Schumpeter and Kirzner consider the interaction between the individual and the environment. Schumpeter states that the individual is the catalyst for the phenomenon of entrepreneurship where he creatively impacts his environment. Kirzner believes that disequilibrium in the environment (market) is the catalyst with individual alertness playing a deciding role.

In evaluating the individual entrepreneur, there are two considerations. The first is to see him in a "static" way and consider psychological and non-psychological factors which make

up his resource base (Fuduric, 2008b). The second, a “dynamic” perspective, is to mark his movements through time and space (context) as he is discovering then exploiting his opportunities. Since the individual does not act in a vacuum, I needed an environmental component to the framework. The environmental conditions needing to be taken into account were the economic, political, industrial and cultural landscapes. In the following two sections, I begin developing my research framework, first with a closer look at individual factors then at environmental factors.

III. INDIVIDUAL FACTORS INFLUENCING THE DISCOVERY AND EXPLOITATION OF OPPORTUNITIES

An entrepreneur goes through two important processes – the discovery of opportunities and the exploitation of those opportunities. In both processes, the entrepreneur is engaging his personality traits (psychological factors) and capability set (non-psychological factors) to start a new venture. Previous research has evidence that specific personality traits and capabilities encourage, but are not deciding factors to the discovery and exploitation of opportunities. Tables 2 and 3 show which traits and capabilities encourage the entrepreneurial process.

Table 3: Individual Factors Important in the Discovery Process

Non-Psychological Factors	Psychological Factors
Prior Life Experiences	Absorptive Capacity
Size of Social Network	Recognition of Causal Links
	Ability to Categorize Information
	Relationship/Pattern Making
	Understanding Processes
	Evaluating Information Accurately

Table 4: Individual Factors Important in the Exploitation Process

Non-Psychological Factors	Psychological Factors
Opportunity Cost	Extroversion
Working Spouse	Need for Achievement
Higher Level of Education	Risk-Taking
Career Experience	Desire for Independence
General Business Experience	Locus of Control
Functional Experience	Self Efficacy
Industry Experience	Overconfidence
Start-up Experience	Intuition
Having a Role Model	

During the discovery process two things are important: non-psychological factors that give the individual better access to information and psychological factors that are linked with cognitive capabilities (Table 2). The exploitation process on the individual level also has psychological and non-psychological factors which are listed in table 3. The elements of the above tables are examined in more detail in the next two sections. First, the factors of the individual discovery process are covered then the factors of the exploitation process.

A. The Opportunity Discovery Process – Individual Level

The discovery of opportunities is not done on the collective level. What makes the study of entrepreneurship different from other management or economic disciplines is that we are examining the role of the individual. There are two reasons people discover business opportunities. First, they have better access to information (non-psychological) and second, they have specific cognitive capabilities (psychological).

Non-Psychological Factors

Research has provided empirical evidence for two factors that influence the likelihood that people will get early access to information which increases the likelihood that an opportunity will be discovered. They are: prior life experiences and the breadth of their social network.

Two aspects of **life experience** have proven to increase the likelihood that people will discover opportunities: **job function and experience variety**. It seems that people in certain careers are more likely to see new venture opportunities. Those careers are often in the field of the natural sciences, engineering and R&D. The nature of these jobs seems to provide easier access to new knowledge and technology. (Freeman, 1982; Klepper & Sleeper, 2001; Roberts, 1991). Regarding experience variety, it has been shown that people with greater variation in employment experience (Evans & Leighton, 1989) and in the places that they have lived (geographic mobility) are more apt to become entrepreneurs (Delmar & Davidson, 2000)

The **social network** is an important way that people receive information. Characteristics of a social network that encourages opportunity discovery are: diversity of the actors in the network to help avoid redundant pieces of information (Aldrich, 1999), strong ties to people encourages them to believe that the information they receive is accurate (Casson, 1982). Strong ties in a network are very important for an entrepreneur. Studies have shown that entrepreneurs, more than managers, obtained information from people they knew and trusted (Koller, 1988). Weak ties have an important purpose for the entrepreneur as well.

Entrepreneurial opportunities are positively related to the number of weak-ties in an entrepreneur's social network (Singh, Hills, Hybels, & Lumpkin, 1999). Weak ties are like informational bridges giving the entrepreneur access to different inputs than he would from his own strong-tie network. Singh also discovered that more opportunities are recognized by entrepreneurs who use a mixture of strong and weak ties versus using only strong or only weak ties (Singh et al., 1999).

Psychological Factors

There are two groups of cognitive capabilities that have been shown to ignite the opportunity recognition process. The first is **absorptive capacity** which basically says that prior knowledge provides an absorptive capacity that facilitates the acquisition of additional information about markets, technologies and production processes, which enhances the ability to create new entrepreneurial frameworks in response to new information (Cohen & Levinthal, 1990). Two types of knowledge enhance the absorptive capacity necessary for opportunity recognition: knowledge about markets and knowledge on how to serve them (Shane, 2000).

The second group of cognitive processes that enhance the entrepreneurial discovery are: being able to see **causal links, being able to categorize information, seeing relationships and patterns in information, understanding how processes work and evaluating assumptions and information accurately** (C. M. Gaglio & Katz, 2001). These processes are heavily influenced by levels of intelligence (De Wit & Van de Winden, 1989), perceptive ability (Hills, Shrader, & Lumpkin, 1999), creativity (Sarasvathy, 2001; Schumpeter, 1934), and being prepared to take risks (Kaish & Gilad, 1991).

B. The Opportunity Exploitation Process – Individual Level

The process and outcome of opportunity exploitation depends on the nature of the opportunity itself, the economic, political, industrial, socio-cultural environment, and finally, non-psychological and psychological individual characteristics. The environmental factors are handled in section IV. I examine individual factors in the exploitation process in the following section.

Non-Psychological Factors

Non-psychological factors important in the exploitation of opportunities include the assessment of the opportunity cost of opening a business, levels of education, career experience, having role-models, age, social position and social ties.

Making the decision to start a business always means that the security of a steady salary and continuous employment needs to be forfeited. Therefore, people with low **opportunity**

costs will be more likely to become entrepreneurs (Amit, Glosten, & et.al., 1993). Income, unemployment and the presence/absence of a working spouse affect the level of opportunity costs and thus the readiness of individuals to begin new ventures.

There are conflicting reports on the influence of **income** on the level of self-employment. The first argument states that if the wage rate is high then the opportunity cost of self-employment is high. The second states that high salaries are an indicator of an affluent economy with above average rates of small business survival. Third, high income levels indicate that founders find start up financial capital and at a lower cost (Verheul, Wennekers, Audretsch, & Thurik, 2001).

The presence of a **working spouse** tends to lower opportunity costs for the potential entrepreneur (Evans & Leighton, 1989). The adverse effects of failure are cushioned by the income of a spouse.

Other factors such as having a higher level of education, career experience, general business experience, functional experience, industry experience, start-up experience, having had a role-model, being middle-aged, having a higher social position and many social ties are positively correlated with the tendency to be self-employed. It is beyond the scope of this paper to discuss the research supporting the conjectures behind each factor. The interested reader may find more details in my previous paper (Fuduric, 2008b).

Psychological Factors

Researchers have analyzed a wide range of psychological factors encouraging entrepreneurial behavior. This strain of research states that people will exploit opportunities because psychological characteristics lead people to make different decisions about opportunities than other people with the same information and skills. It is important to note that psychological characteristics influence the exploitation decision but do not cause it (McClelland, 1961). Criticisms for this angle of research argue that personality traits change with changing contexts (Gartner, 1988). Still, certain personality characteristics stand out as influences, if not causes, of the opportunity discovery and exploitation decision.

People are more likely to exploit opportunities if they are more **extroverted** (Barrick & Mount, 1991) which means that they have attributes of sociability, assertiveness, talkativeness, expressiveness, impetuosity. Compared to introverts, extroverts have are more likely to exploit opportunities because they are better able to assemble resources and organize under conditions of information asymmetry and uncertainty Shane (2003).

Being more **disagreeable** is a tendency that helps entrepreneurs sift through information deciding whether they need it or not. Their critical approach to information is enhanced by a suspicious and skeptical nature. Some empirical evidence supports this when Brodsky (1993) examined self-employed females and female managers and found that the self-employed women were less trusting than the managers.

The **need for achievement** leads people to choose activities that involve personal responsibility for the outcome, require the specific skills of the individual, and give a direct feedback loop. The nature of entrepreneurial opportunities are novel and not clearly specified thereby providing a challenge that is eagerly met by people with a high need for achievement (Harper, 1996). Exploiting opportunities requires goal setting, planning and information gathering. People who are achievement focused have the drive to establish future goals, gather information, learn (Miner, Smith, & Bracker, 1989), bring ideas into fruition, sustain goal-directed activities over a longer period of time, persevering through failures, setbacks and other obstacles that are inevitable when decision making is done under uncertainty and with incomplete information (Wu, 1989). In comparison to the general population, it seems that entrepreneurs have a higher need for achievement (Caird, 1991).

The types of risk entrepreneurs bear are product, technical, market, and competitive risk. **Risk-taking** is therefore a fundamental part of entrepreneurship (Knight, 1921). Compared to the general population, entrepreneurs are more likely to exhibit higher levels of risk-taking behavior (Begley & Boyd, 1987; Caird, 1991).

The **Need for Independence** is simply an aspect of personality that drives people to undertake actions alone rather than involving others. Entrepreneurship requires the trust in one's own judgment versus the judgment of others. Some empirical evidence suggests that entrepreneurs' desire for independence is the most common reason they give for starting their own businesses (Burke, Fitzroy, & Nolan, 2000)

Having an internal **locus of control** is a person's belief that he can influence his environment and will be more likely to exploit an entrepreneurial opportunity than a person with an external locus of control. Research also points to this fact, even across cultural boundaries (Bonnett & Furnham, 1991; Evans & Leighton, 1989).

Self-efficacy is the confidence in one's own ability to perform a given task. Several studies have proven that entrepreneurs have higher self-efficacy levels than managers (Baron &

Markman, 1999; Hull, Bosley, & Udell, 1980) that self-efficacy is positively related to exploiting opportunities (Zietsma, 1999), and that it increases entrepreneurial intentions (Chen, Greene, & Crick, 1998).

Overconfidence is the belief in one's own judgment that is too optimistic considering actual data. Overconfidence encourages people to exploit opportunities (Busenitz & Barney, 1997) in situations where they do not have enough information. Further investigation would reveal poor odds, a short opportunity cycle, or even the low value of the opportunity (Busenitz & Barney, 1997; Casson, 1995; Wu, 1989).

Intuition is the belief that something is true even though it has not been proven to be. People who heavily rely on their intuitive abilities tend to exploit entrepreneurial opportunities (Allinson, Chell, & Hayes, 2000; Busenitz & Barney, 1997). The heavy reliance on intuition is due to the fact that the exploitation of an entrepreneurial opportunity is done under uncertainty, under time pressure and with limited information. Schumpeter even suggested that entrepreneurs must have the ability to make decisions using intuition rather than analyzing information Schumpeter (1934).

After examining tables 2 and 3, I found that I had more questions regarding the individual's psychological predisposition. If opportunity seeking and exploiting behavior is really an exercise in cooperation entailing varying degrees of trust, how do the psychological characteristics like open-mindedness, the willingness to share information, and jealousy impact this process? Also, since entrepreneurial action is a risk-filled undertaking, how do entrepreneurs overcome the fear that inevitably arises during their process?

The above psychological and non-psychological factors only present what research has observed in entrepreneurs. It is important to keep in mind that the **action** to explore and exploit opportunities is not necessarily due to the above factors. The decision to explore and exploit opportunities is embedded in the environmental context as well. Thus, the characteristics of the individual can never be viewed without considering his behavior within a context. The environmental context will be examined in more detail in the next section.

IV. ENVIRONMENTAL FACTORS INFLUENCING THE DISCOVERY AND EXPLOITATION OF OPPORTUNITIES

Environmental conditions, such as economic, political, industrial, demographic and cultural factors are known to create or weaken opportunities for entrepreneurs. They are outlined in Table 5 and examined in more detail below.

A. Economic Conditions that Influence Entrepreneurial Opportunities

Entrepreneurship exists under any economic conditions. The state of an economy influences the tendency and form of entrepreneurial activity. The entrepreneurial outcome can lie on a spectrum of two extremes; from an innovative, market and economy shifting venturing or on the other end of the spectrum, an illegal corrupt form of venturing and, of course, everything in between. Economic conditions presented in this section affecting the type of opportunities available are: stable macroeconomic conditions & economic growth, unemployment, income disparity, capital availability and taxation.

Table 5: Economic Conditions that Influence Entrepreneurial Opportunities

CONDITION	EFFECT ON OPPORTUNITY EXPLOITATION
ECONOMIC ENVIRONMENT	
Stable economic conditions & economic growth	Can increase or decrease
Unemployment	Can increase or decrease
Income disparity	Can increase or decrease
Capital availability	Can increase or decrease
High Taxation	Decreases

When a nation or region experiences stable **macro-economic conditions** and sustained **economic growth**, the higher the likelihood is that the form of entrepreneurship being manifested is also of a higher value to society (GEM, 2006). Often in such an environment, low-value, low-innovation entrepreneurship will decrease in favor of employment and high value, innovative entrepreneurship will increase because the environmental conditions have improved enough to provide higher value resources.

Unemployment's impact on entrepreneurship is closely related to the wage rate. Explaining spatial variations in new firm formations, Storey (1994), argues that if unemployment rates are high then individuals are more likely to consider self employment opportunities. Yet he also states that high rates of unemployment reflect a lack of economic flexibility, perhaps "a lack of enterprise" in the population driving the demand shortage. Thus, there is a two-way causation where high unemployment can stimulate levels of entrepreneurship due to no other job opportunities being available and, on the other hand, low levels of unemployment can increase levels of entrepreneurship due to a robust and flexible economy. This either-or

situation encourages one to ask: Is there a difference in the type of entrepreneurship being practice during periods of high or low unemployment?

Income disparity can impact entrepreneurship from the supply and the demand side of entrepreneurship. Considering the **supply side**, high income disparity can push low wage earners into self-employment, because their opportunity costs of entrepreneurship are low. For people teetering on the verge of poverty, starting a business can be their last resort for survival in some form of self-reliance. High income disparity can also encourage the wealthy to start a business because of the low risk nature of finding and using financial capital. On the **demand side**, high income disparity in a nation encourages a diverse nature of goods and services on the market. The wealthy seek basic need and luxury products while the poor focus on basic need, subsistence products. While observing 20 OECD countries, Ilmakunnas, Kanninen, and Lammi (1999) found that income disparity has a positive influence on entrepreneurship in a nation. Bosma, Wennekers, de Wit, and Zwinkels (2000) found income disparity to have a positive influence on self-employment in a time-series study conducted in the Netherlands.

We see that income disparity encourages entrepreneurship from the supply and demand perspectives. Yet, an increase in entrepreneurship continues to encourage income disparity due to the different forms of businesses being created by the wealthy and the poor. In a study conducted by the OECD there is empirical evidence that shows that there is more income inequality amongst the self-employed than amongst wage earners (OECD, 2000).

B. Political/Regulatory Conditions that Influence Entrepreneurial Opportunities

Table 6: Political/Regulatory Conditions Influence Entrepreneurial Opportunities

CONDITION	EFFECT ON OPPORTUNITY EXPLOITATION
Rule of Law/Property Rights	Increases
Macroeconomic Policies	Depends
Licensing & Bankruptcy Policies	Increases
Deregulation	Increases
Resource Policies	Increase
Sectoral Policies	Increase
Decentralization of Power	Increase

There is still the government's role to consider. In terms of its "correcting" role, ideally governments can intervene when markets fail. Market failure occurs when there is a high level of market concentration creating cartels or monopolies which sabotage competition, when resources concentrate in urban areas leaving peripheries impoverished, when information discrepancies exist, when markets are absent or dysfunctional, and in the privatization of collective goods (Storey, 1994). The government can insure that competition remains unencumbered which leads to the efficient allocation of resources. They can do this by encouraging economic agents to act fairly in the distribution of income, payment of taxes, and the honoring of contracts.

Policy measures supporting entrepreneurial opportunities are such a vast topic in the field of entrepreneurship that they cannot be discussed in great detail in this paper.³ Policy factors having the most impact on entrepreneurship, however, are integral to the environmental framework which I am developing. In the subsequent sections, I will be giving a short overview on the effects of macro-economic policy, licensing, bankruptcy, deregulation, resource policies, and industry-related policies on entrepreneurial opportunities.

1. Macro-Economic Policies:

Macro-economic policies are policies focusing on the economy as a whole and not directly influencing the level of business ownership. However, macro-economic policies have an important impact on the trading position of small firms. It provides a framework within which taxation, the labor market, regulation, social security and income policy affect small businesses (Storey, 1999). Because macro-economic policies can provide barriers or stimulus to small business development, they should be instituted with great care and foresight.

2. Regulation of Business Beginnings and Endings – Licensing & Bankruptcy

The intensity of **licensing** demands a new entrepreneur experiences will dictate when and how he will go about starting his business. It is important in this most un-entrepreneurial phase to limit barriers and costs so that the entrepreneur can quickly establish himself in the market. Some potential costs and barriers are found in certifications, standardizations, financial capital outlays and procedural complexity.

Certain professions require a certain skill level or **certification** to be able to supply their product or service e.g. law, accountancy, and medicine. In addition, some fields require

³ For a more detailed discussion on the influence of government policy on entrepreneurship see (Storey, 1992), (Storey, 1994), and (Storey, 1999).

certain environmental and safety **standards** (e.g. architecture, engineering) set by the government. Another potential barrier for entrepreneurs is the level of **financial capital** needed to receive a business license. There is a large variance in national requirements for financial capital. In the US only 10USD are required for a sole proprietorship and in Switzerland 10,000 CHF are required. The **procedural complexity** of the forms and approvals required can also be a source of aggravation and a barrier for the entrepreneur.

If the business start-up procedure is complicated and/or rigorous, it can have two effects. First, the costs can have the effect of putting too great a burden on the entrepreneur's willingness to take the risk of starting a new business. Second, start-up requirements can have a positive impact on the level of entrepreneurship in the long run because they can contribute to a higher quality of entrepreneurship and a higher business survival rate (Verheul et al., 2001).

Often seen in the most negative light, **bankruptcy** is a part of the entrepreneurial process and actually has some benefits. When an entrepreneur experiences failure, two things can occur. First, the experience is a source of learning and experience for the entrepreneur and for the entrepreneur's environment. Second, this learning functions as a signaling effect to the individual or other economic agents to either abandon this business idea or to use the new knowledge in different ways to tweak the idea and try again. Entrepreneurship can be discouraged if policies exist which severely restrict the ability of a firm to close or restructure (OECD, 2000). The government can help in this regard by regulating bankruptcies by using discharge clauses which free the debtor from his debt within a certain time frame. Other rescue possibilities include the postponement of debts and restructuring. In practice, the temporary debt moratorium is more frequently used than reorganization (EIM/ENSR, 1997).

3. Deregulation

According to Storey (1999), deregulation has two aspects. First, it lifts administrative and legislative burdens that take time, energy and resources away from fundamental entrepreneurial activity. Second, it stimulates free markets which increase competition. A deregulated environment ensures that only the fittest businesses can remain in the market due to competitive pressures. Such an environment makes it possible for people to reallocate resources to new uses in ways that are more profitable or that redistribute wealth. Research has shown that deregulation of industries such as the telecommunications, utilities, railroad, and banking have created new industry structures, new products and markets, and have redefined the way profits can be made. For examples of how political changes affected the deregulation of electric utilities see (Sine, Haveman, & Tolbert, 2001),

and banking (Caroll & Hannan, 2000; Holmes & Schmitz, 2001). On a more macro level, the change from a communist/socialist system has been known to create more entrepreneurial opportunities (McMillan & Woodruff, 2002).

4. Resource Related Policies

Government resource related policies stimulate small firm access to labor, financial capital and information/knowledge. Policies have the distinction of either improving the financial conditions of the firm or improving the operating efficiency of the firm (Storey, 1994).

Financial oriented policies focus on reducing market imperfections and take the form of alternative capital markets. Often this is seen as direct payments of loans or grants to the firm or even as a form of venture capital. One problem with stimulating entrepreneurship in this way is that the wrong type of person may be attracted to such an offer. A person may become an entrepreneur because the funding is available not because their idea is marketable.

Efficiency enhancing policies remedy information imperfections and often include business training, consultancy and counseling. Research has shown that government supplied entrepreneurial services help most in initiating and stabilizing a business but does very little for the growth of businesses (Bosma & Harding, 2006).

5. Sectoral Policies

Instead of general policies that focus on the small business sector as a whole, policies can also target specific sectors, regions or groups. Some of these policies include different groups of people (women, young people, immigrants and the unemployed), different sectors of industry (IT, biotechnology, life sciences). And yet, some policies focus on encouraging entrepreneurial activity in different geographies in the hope of combating rural depression or urban decay. There are mixed results with sectoral policies (Storey, 1994). It seems that execution and efficiency are key to carrying out these policies successfully.

C. Industry Conditions

Certain conditions in industries encourage or discourage entrepreneurial opportunities. Table 7 shows which knowledge, demand, structural conditions affect opportunities and how they affect them.

Table 7: Industry Conditions that Influence Entrepreneurial Opportunities

CONDITION	EFFECT ON OPPORTUNITY EXPLOITATION
KNOWLEDGE CONDITIONS	
R&D Intensity, Technological Development	Provides new markets, products, ways of organizing, technology, raw materials
Locus of Innovation	Public sector, university research, R&D spillovers encourage new firms
Strength of Patents	Strong patent protection supports new firms.
DEMAND CONDITIONS	
Market Size	Larger markets provide more opportunities
Market Growth	Growing markets provide excess demand
Market Segmentation	Segmentation enhances opportunities due to the exploitation of niches by nimble small firms
INDUSTRY STRUCTURE	
Structure	Service economy, spin-offs, clusters encourage new ventures
Industry Age	Age reduces opportunities for new firms
Dominant Design	Industries converging on a dominant design have less opportunities.
Industry Concentration	Density increases the likelihood of venture failure.
Profitability	High profit margins encourage new firms.
Cost of Inputs	Lower input costs encourage new firms
Capital Intensity	Lower capital intensity supports new firms
Advertising Intensity	Lower advertising intensity supports new firms
Average Firm Size	Small firm sizes encourage new entrants

1. Knowledge Conditions

R&D intensity and technological advancement creates opportunities for entrepreneurs because it makes it possible for people to allocate resources in different and potentially more productive ways. It enables the creation of new products which diversifies and intensifies demand (Casson, 1995). Technology that advances the way communication is undertaken and information exchanged aids in market-based coordination supporting the existence of small firms (Jovanovich, 1993). Research shows that the number of firms tends to rise in the early stages of a product's life (Carree, Audretsch, & Thurik, 2001; Klepper & Simons, 1994) Which in turn, proves why innovative, high technology businesses contribute the most to employment (Wong, Ho, & Autio, 2005).

A study undertaken by Klevorick, Levin, Nelson & Winter (1995) showed that technological change is a greater source of opportunity in some industries than others. They showed that industries with closer ties to the natural sciences have more entrepreneurial opportunities. They also showed that the source of opportunities differs across industries. In some industries, these opportunities lie outside of the value chain and are found in universities,

government agencies, and research laboratories. In other industries, these opportunities lie within the value chain and include firms, their suppliers, and their customers. Technological advances can also have a negative effect on some forms of entrepreneurship. They can create barriers to entry due to high levels of investment and R&D costs.

2. Demand Conditions

Demand conditions conducive to entrepreneurial opportunities basically follow the tenet – large markets, more opportunities. Also, growing markets are sources of excess demand. In expanding markets existing enterprises cannot keep up with new demand therefore creating holes for new entrants. In a segmented market, there are many niches to exploit – the smaller the firm the faster they can take advantage of their reaction time to harness a part of the market that a larger, slower firm cannot.

3. Industry Structure

An industry's structure either encourages or discourages new entrants. Three structures which encourage entrepreneurship are the service economy, outsourcing and spin-offs, and clusters (Verheul et al., 2001). The **service economy** supports a level of economic growth where small firms have many opportunities. They stem from needing little start up capital thus limiting barriers to entry. According to the EIM/ENSR report (1997) most western countries function within a predominate service economy which increase the likelihood of more entrepreneurial activity.

With the advent of the 1980's, large firms were returning to their core competencies and divesting themselves of products and services that were draining resources. This divestment of non-core businesses took the form of **spin-offs and outsourcing** creating ready-made businesses for the entrepreneurial minded. The era of returning to core-competencies has been verified in Carlsson and Taymaz (1994) who show that a decrease in vertical integration and conglomeration since the 1970's has decreased the average size of firms and increased the number of new ventures.

The third industrial form that enables entrepreneurship is the phenomenon of clustering. **Clusters** have the characteristic that they are business relationships involving various levels of commitment between large enterprises and small businesses (Verheul et al., 2001). The firms are geographically agglomerated, characterized by high density business activity which exhibits cooperation and competition. It is common that they focus on one industrial activity (e.g. the fashion industry in northern Italy) and that small firms offer their expertise

along the production process. The social networks between firms offer a framework for information exchange, support, and knowledge spillovers. This strengthens the position of small firms increasing the likelihood of their success.

The older an industry is, the fewer opportunities there are for small firms. This occurs for several reasons. First, as an industry ages demand begins to level off and shift downward. Second, as an industry ages, the more likely existing firms can fulfill demand requirements. Third, the knowledge base of an industry tends to become more stable as firms move up the learning curve. They develop more efficient ways of developing products or services and serving markets.

If an industry exhibits the possibility of earning **high profit margins** then it also acts as an attraction for new entrants. **Lower input costs** encourage new firm creation because the risk of overextending financially is reduced. Researchers have shown that lower input costs impact the likelihood of new venture success (D. Audretsch & Mahmood, 1995; Reid, 1999). The sources of input costs are found in high initial capital outlays and advertising intensity. A dominant design in an industry creates economies of scale and tends to push out new entrants. Before a **dominant design** is generally accepted, an industry experiences many different forms of organization and product/service offerings which attract entrepreneurial ideas (Geroski, 1995).

D. Demographic and Cultural Conditions Influencing Entrepreneurial Opportunities

Table 8 outlines the demographic and cultural conditions influencing entrepreneurial opportunities.

Table 8: Demographic & Cultural Conditions Influencing Entrepreneurial Opportunities

DEMOGRAPHIC CONDITIONS	Effect on Opportunity Exploitation
Population Growth	Increases
Population Density & Urbanization	Increases
Immigration & Population Mobility	Increase/Decrease
Educational Infrastructure	Increase/Decrease
CULTURAL CONDITIONS	
Social acceptance of entrepreneurship	The more acceptance, the more likely opportunities will be exploited.
Attitudes toward failure & bankruptcy	The more negative the attitude, the less likely opportunities will be

	exploited.
Bureaucracy & Corruption	Decreases the opportunities exploited by legitimate entrepreneurs
Tradition	Increase/Decrease
Social Capital	Increases due to cooperation, trust
Power Distance (PDI)	Depends on context
Uncertainty Avoidance (UAI)	Depends on context
Masculinity (MAS)	Depends on context
Individualism (IDV)	Depends on context

1. Demographic Conditions

Certain demographic conditions affect whether entrepreneurship will take place and what kind of entrepreneurship takes place. These conditions include: population growth, population density & urbanization, immigration & population mobility, and the educational infrastructure.

Population Growth

The population growth rate is a statistic that can have multiple meanings for enabling entrepreneurship. Countries experiencing population growth have a larger portion of entrepreneurs in their workforce than populations not experiencing growth (ILO, 1990). However, population changes have other indirect effects on entrepreneurship levels. First, if a nation is experiencing rising levels of immigration, levels of entrepreneurship tend to rise as well (Storey, 1994). Population growth has the tendency to put pressure on wages thus lowering the opportunity cost of starting a business (Verheul et al., 2001). This would make entrepreneurship a more attractive career option. Third, population growth has the effect of increasing demand for consumer goods which increases market opportunities for new products and services.

Population Density and Urbanization Rate

A healthy urban environment provides many benefits for entrepreneurship to take root, especially a high growth, innovative, high technology form of entrepreneurship. The presence of universities and research centers fuels evolving technologies and promotes innovation as well as providing an economy with an educated workforce. The most desirable markets to conduct business in are those that have a high population density. The attractiveness lies in the diversity of demand in a relatively small geographic area which reduces communication and transportation costs. This mixture of trade, research, diversity, population density, high levels of education has a cumulative effect and attracts other businesses because of the benefits derived from cooperation, spillover effects and the

signaling effect⁴ (David Audretsch & Fritsch, 2000). Not all of the entrepreneurial opportunities in an urban area are of a tangible variety. According to Sarasvathy (2001), areas of large population density also provide intangible assets crucial for entrepreneurial activity such as having forums for informal gatherings (cafes, sport clubs, cultural venues, etc.), the existence of role models, and the potential to experience novel ideas. In contrast to dynamic urban environments, outlying regions (peripheries) have difficulties in attracting human and financial resources to support high growth entrepreneurship. However, with the advent of more sophisticated and less expensive information technology, the distance between the periphery and core is being reduced. For more information on entrepreneurship in peripheries, please see (Fuduric, 2008a).

Immigration and Population Mobility

Immigration can increase or decrease the level of entrepreneurship in a country depending on a host of factors. The immigrants' level of education and skills is a deciding factor if they will start a business or not. If they think that the work available in their host country somehow marginalizes their skills or self-esteem, they will be more likely to start a business. Of course, the environment of the host country is very important. If there are many legal and administrative barriers, it is less likely immigrants will take the opportunity of self-employment. Their lack of social, cultural and often language fluency can be a barrier to maneuvering through bureaucratic waters (Clark & Drinkwater, 2000). Several pieces of empirical evidence support the argument that population mobility is a source of entrepreneurial opportunity. For example, Reynolds et al (1994) examined a cross regional variation in firm birth rates for the mid-1980's in France, Germany, Italy, Sweden, the United States, and the United Kingdom. They found that immigration to a region was positively correlated with firm births per 100 existing firms and per 10 000 people in five of the six nations. For other examples of population migration and positive correlations to entrepreneurship please see: (Pennings, 1982; Schell & David, 1981)

Immigrants tend to open businesses offering something to do with their prior knowledge, for example, supplying the immigrant community with restaurants, groceries and other supplies from their home countries. Often these ventures fail because of the quick saturation of a small market share (Clark & Drinkwater, 2000). The rate of starting new firms also differs with the cultural background of the immigrant. It has been noted in the United States that immigrants from Asia are far more likely to become entrepreneurs than immigrants from Africa.

⁴ The signaling effect simply means that firms are attracted to an area because other firms seem to be successful.

Educational Infrastructure

The educational infrastructure can affect opportunity exploitation on two levels of analysis. On the first level, the educational infrastructure affects the form of entrepreneurship taking place. For example, the higher the level of education available in a society, the more likely that people are engaging in an innovative, robust form of entrepreneurship and vice versa, the lower the level of education available, the more likely that a lifestyle or subsistence form of entrepreneurship will take place. The level of education of a potential entrepreneur also affects how resources are viewed. It has been empirically proven that the lower the level of education, the less likely an entrepreneur will see the value of getting grants from government or non-government subsidized aid (Meccheri & Pellini, 2006).

Analyzing the role of education on another level, it has a direct and an indirect affect on opportunity exploitation. In a direct way, universities are one of society's breeding grounds for new technology, research and information/knowledge networks which are integral elements for new, innovative ventures (Bull & Winter, 1991; Pennings, 1982) In a more subtle way, educational institutions can be a source or barrier of opportunity because they set the rules as to how information and knowledge will be transferred (Aldrich & Wiedermayer, 1993). These rules form opinions and actions on whether trust can grow, if cooperation can take place, if creativity is valued and whether failure is managed without judgments. The presence of trust, creativity, cooperation and the ability to take risks and fail without being shamed are all aspects that can encourage the budding entrepreneur to explore new venture opportunities. These attributes on an educational level start leading us to the question of cultural factors on opportunity exploitation on a national level which is explored in the next section.

2. Cultural Factors

Geert Hofstede defines culture as "the collective programming of the mind which distinguishes the members of one human group from another." (Hofstede et al., 2004p. 21) Boyd and Richardson (1985) explain in more detail what "collective programming" involves by defining culture as "the transmission from one generation to the next via teaching and initiation of knowledge, values and other factors that influence behavior." Entrepreneurial action is not only defined by economics, politics, and industries but by the key words, or diffuse cultural considerations taken from the above definitions: collective programming, transmission of knowledge, generations, teaching, initiation, values, and behavior. Davidson 1995 identifies two views regarding the relationship between cultural values and entrepreneurial behavior. They are the aggregate psychological trait (first presented by

McClelland (1961) and examined in section III of this paper) and social legitimation (first presented by Etzioni (1987)) explanation for entrepreneurship.

The social legitimation view suggests that certain cultural factors are known to have a positive effect on entrepreneurial behavior and action. They include: social acceptance of business ownership, the social acceptance of business failure and bankruptcy, the reduction of bureaucracy and corruption (Etzioni, 1987). Other cultural factors like tradition and levels of social capital will also influence entrepreneurship levels. Social legitimization may be one way to look at how cultural factors shape entrepreneurial action, another way is by linking Hofstede's cultural indices (Hofstede, 1984) to entrepreneurship. The findings using the cultural indices turn out to be quite contradictory. The indices considered are: Power Distance (PDI), Uncertainty Avoidance (UAI), Masculinity (MAS), Individualism (IDV) (Hofstede et al., 2004). The next section explores the effects of social legitimation including tradition and social capital as well as Hofstede's cultural indices on opportunity exploitation.

Social Acceptance of Business Ownership

It can be stated that the more socially acceptable entrepreneurial activities are, the more likely they are to occur. Blanchflower (2000) found this pattern by comparing nations. The author examined data from the International Social Survey which is a random sample of people in 23 nations in 1997 and 1998. He found overwhelming evidence of large national differences in the preference for self-employment and that such preferences were positively correlated with actual self employment. Other researchers came to the same conclusions. Swanson and Webster (1992) wanted to understand if cultural beliefs directly affect decisions to engage in opportunity exploitation. They found that negative attitudes toward entrepreneurs actually kept people from starting their own ventures in the Czech and Slovak Republics. On the other hand, perceptions of the high social status of entrepreneurs have had an encouraging effect on MBA's in the US to start their own businesses (Begley et al., 1997).

Business Failure and Bankruptcy

A non-financial consequence of bankruptcy is the social stigma which differs between countries. In the United States, failure is often seen as an unfortunate outcome of a "good try". Whereas in most European countries, bankruptcy is often seen as a personal failure (OECD, 1998). To stimulate risk-taking entrepreneurial activity, governments could influence societal views toward failed enterprises by providing certain safety nets to lessen risk aversion. A policy suggestion by Kirzner (1997) goes as far to say that governments should guarantee free entrepreneurial entry into any market where profit opportunities are

perceived to exist but that an exit free of social stigma and financial burden should be safeguarded.

Bureaucracy and Corruption

In societies where bureaucracies and the judicial system are inefficient and corruption runs rampant, economic growth is hampered. Entrepreneurial action can and does take place in these settings but limits society's benefits from entrepreneurship. Corruption and bureaucratic inefficiencies lower private investment (Mauro 1995) which implies that fewer new ventures will be opened. When there is less private venturing then society is deprived of taxation income and the potential gains of higher employment.

Cultural Beliefs and Tradition

Cultural beliefs and tradition has either a positive or a negative effect on entrepreneurial action. Its positive effects can be in the form of providing a legacy. The legacy of living in or coming from an entrepreneurially active community (either in the larger sense or within a family unit) which displays positive attitudes towards entrepreneurship and provides entrepreneurial role-models increases the likelihood that entrepreneurship will be a respected activity. Attitudes embedded in traditions and culture that support entrepreneurship are the acceptability of using individual judgment, exhibiting reciprocity and withholding moral commitments which facilitates resource acquisition (Shane, 2003). Another positive aspect of tradition is linked to assets. Paul Benneworth (2004) argues that tradition helps assets to remain in a region serving as anchors for entrepreneurs to embed new firms.

Some empirical evidence shows that tradition can impede entrepreneurial action. A study has presented the view that certain cultures, specifically, Irish, African, Hispanic, and Polish, have less incidence of entrepreneurial behavior in the United States (Butler & Herring, 1991). Webster (1992) found that negative attitudes toward entrepreneurs discouraged people from starting companies in the Czech and Slovak republics. Of course, this general negativity could have been a reaction to unfair privatization schemes after the fall of communism which colored the general public's view of what entrepreneurship entails.

Since entrepreneurship is a social construction, it will reflect the values, culture, and traditions of wherever it manifests. Because of its fluid characteristics depending on the people and the environment which engender it, entrepreneurship can have productive, unproductive and destructive tendencies (Baumol, 1990). Thus, entrepreneurs have the

interesting task of oscillating between being the bearers of traditions they inherit and being the harbingers of the modern.

Social Capital

Anderson and Jack (2002) credit the actual term “social capital” to Jacobs (1969) while Loury (1977) developed the individualistic and economic conception (Cooke & Wills, 1999). It is broadly defined as an asset that exists in social relations and networks (Bourdieu, 1986; Portes, 1998). In their literature review, Anderson and Jack (2002) have identified four research dimensions of social capital. The first is the structural dimension introduced by Granovetter (1985) with his delineation of strong and weak social ties, their characteristics and benefits. The second is the relational dimension which has been studied on the level of the individual (Belliveau, O'Reilly, & Wade, 1996), firms and societies (Cooke & Wills, 1999; Putnum, 2001; Uzzi, 1997) and of the nation (Fukuyama, 1995; Putnum, Leonardi, & Nanetti, 1993). The third is the cognitive dimension described as social capital being supported by shared values or norms of acceptable behavior (Nahapiet & Ghoshal, 1998). The fourth is what Leana & Van Buren (1999) describe as associability which is the skill to act socially with others and the willingness to subordinate personal desires to group objectives.

The features and benefits of social capital are far-reaching. It has been described as the glue that binds and the lubricant that eases economic relations (Anderson & Jack, 2002). Robert Putnum describes the benefits of social capital as giving rise to reciprocity, trust, and increased cooperation (Putnum, 2001). Flora (1998) notes that social capital activated in networks facilitates the co-ordination and co-operation of the network for mutual benefit. It may take the form of obligations arising within group membership (Bourdieu, 1986), or obtaining resources through the contacts within a network. These links can provide privileged information or access to resources or opportunities.

Social capital was originally seen as a relational resource which individuals use for development (Jacobs, 1969; Tsai & Ghoshal, 1998). A broader view considers social capital as sets of resources embedded in relationships (Burt, 2002). This notion of a resource fits neatly with the concept of entrepreneurial networks because although entrepreneurship is a creative process it operates within constrained parameters (Anderson & Jack, 2002). The constrained parameters will determine how much information, explicit and implicit knowledge and access to physical resources the entrepreneur has. Fafchamps and Minten (1999) confirmed in their study that the social capital mined from networks is essential for firm growth. They conclude that smart entrepreneurs accumulate it in the same way they do physical resources. Social capital arises not as a by-product of their social interaction but as an investment in them.

Anderson and Jack (2002) found that the formation of social capital among entrepreneurs emphasized *process* rather than outcomes. They found that entrepreneurs develop social capital more in terms of “building potential rather than harvesting benefits” (Anderson & Jack 2002). A social capital building or networking etiquette was isolated where no one entrepreneur could dominate nor appear to be self-seeking. Their interactions were iterative and mutual processes. Anderson and Jack (2002) found that the far reaching networks arising from social capital make the entrepreneurial organization broader than the entrepreneurial business per se. This in itself gives the entrepreneur access to resources he would otherwise not have if left to operate in an isolated way. This refutes the image we often have of the entrepreneur as a lonely figure. Instead, he is a highly social being and the more competent he is socially, the more resources he has at his disposal. The research on social capital, networks and entrepreneurship is multi-level and broad. The scope of this paper does not support an exhaustive discussion on this topic.

Hofstede's Cultural Indices Effects on Entrepreneurship

Four studies by different authors have come up with contradictory evidence as to how entrepreneurship is affected by Hofstede's cultural indices. When understanding how culture affects inventions in a society, Shane (1992) found that when comparing countries, low PDI (power distance) and high IDV (individualism) are responsible for more inventiveness. In another study, Shane (1993) examines culture and innovation (number of patents). He found that having a weak UAI (uncertainty avoidance) has the strongest influence on innovation, even greater than per capita income. Another outcome of this study was that low PDI and high IDV are related to innovation though by a lesser extent than UAI.

In a direct contradiction to Shane's results, McGrath, MacMillan and Scheinberg (1992) compare entrepreneurs and non-entrepreneurs in eight countries. They found that the entrepreneurs had higher levels of PDI, higher levels of IDV, and MAS (masculinity). They scored low on UAI. The power distance index contradicts Shane's findings. A reason for this may have been that one study compared countries and the other compared entrepreneurs to non-entrepreneurs.

Comparing countries, Baum et al (1993) hypothesized that not high, but low, individualism may stimulate entrepreneurship. Their argument states that in an individualistic society organizational structures are better adapted in dealing with people with individualistic characteristics. Thus, less individualistic societies push people with entrepreneurial needs into self employment because of their dissatisfaction with the status quo. Acs, Audretsch

and Evans (1994) in Hofstede et al (2004) empirically examine culture and self-employment at the level of nations. They found similar results to Baum's where higher levels of UAI and decreased levels of individualism are related to higher levels of entrepreneurship.

As mentioned before, a dissatisfaction of mainstream corporate cultures which are usually reflected in society could give rise to more self-employment. Other more micro level dissatisfaction claims have been confirmed in several studies. Hofstede et al (2004) and Brockhaus (1982) have shown that dissatisfaction is often embedded in several dimensions of job satisfaction, more specifically with: the work itself, with management, and with promotion opportunities. Hofstede et al (2004) have found that where there is a larger dissatisfaction with society and life in general, there are higher levels of entrepreneurship. They also found that countries with higher levels of entrepreneurship have larger power distances, more competitiveness, more corruption, lower levels of female labor participation and more poverty. The cultures of poor countries are characterized by large power distances, low individualism and by strong uncertainty avoidance (Hofstede et al., 2004). At the same time the people in these countries are often dissatisfied with society and life in general (Hofstede et al., 2004). This is not very surprising since less innovative, more common forms of entrepreneurship take root in these settings. These circumstances encourage a high incidence of small-scale, non-novel self-employment. As countries gain in prosperity, dissatisfaction seems to diminish. The result is a definite decline in the level of entrepreneurship.

Even though Hofstede and his colleagues did not control for different forms of entrepreneurship, one can deduce that as the general level of entrepreneurship declines, the quality of entrepreneurship increases. In other words, forms of entrepreneurship emerge which positively influence the employment rate and national/regional output. This happens when countries become fully industrialized and a service economy sets in, information technology and differentiation of markets create dis-economies of scale and invite new, innovative forms of entrepreneurship. Thus, evaluating whether entrepreneurial activity should be encouraged or discouraged depends on the opportunities made available by economic, political, industrial and cultural forces and how these opportunities interact with the profit-seeking behavior of the entrepreneur and the societal benefits derived from his actions.

A highly complex interaction was laid out in the previous two sections where individual and environmental factors influenced the discovery and exploitation of opportunities. It has been my goal to highlight the many different factors and yet to harness them to create a

framework from which we can observe the changing face of entrepreneurship. This framework now comes together in the conclusion.

VII. Conclusion

Each section in this paper has a specific purpose in leading up to the creation of the individual and environmental framework in Table 9. The first section provides an orienting literature review of the opportunity discovery/exploitation research landscape. The literature review's purpose is to provide a learning tool for me but also a structuring tool to see where holistic approaches have been taken in entrepreneurship research. Holistic approaches in questions of economic development of the periphery are rare in the field of entrepreneurship (Steyaert & Katz, 2004). This stream of research is more abundant in the field of economic development even if it tends to be more fragmented (Benneworth, 2004).

The second section examined what are considered to be the typical forms of entrepreneurship and how entrepreneurial opportunities arise. The Schumpeterian form of entrepreneurship is described as being creative, novel, of high economic impact. The Kirznerian form of entrepreneurship is described as being non-novel, imitative, having less of an impact on national economic or job growth. Schumpeter and Kirzner also shed light on how entrepreneurial opportunities arise by focusing on opportunity creation and opportunity discovery, respectively. The field of entrepreneurship tends to, at worst, ignore non-novel entrepreneurship or, at best, begrudgingly state its necessity on the way toward economic development and Schumpeterian entrepreneurship (GEM, 2006). Therefore, in section II, the goal was to expand what we think novel or non-novel entrepreneurship is and present the notion that Schumpeterian and Kirznerian entrepreneurship overlap at different times in the entrepreneurial process.

This blurring of boundaries between individual initiative and environmental opportunities is what inspired the rest of this paper. Which individual capabilities and environmental factors encourage entrepreneurial action? Sections III and IV begin answering this question by building a framework of individual and environmental factors integral in the entrepreneurial process. It serves as a guideline for my empirical research and is summarized below in Table 9.

Table 9: Individual & Environmental Framework for the Entrepreneurial Process

THE INDIVIDUAL FRAMEWORK

DISCOVERY PROCESS

EXPLOITATION PROCESS

Individual Capabilities	Psychological Factors		Individual Capabilities	Psychological Factors
Prior Life Experiences	Absorptive Capacity		Opportunity Cost	Extroversion
Size of Social Network	Recognition of Causal Links		Working Spouse	Need for Achievement
	Ability to Categorize Information		Education	Risk-Taking
	Relationship/Pattern Making		Career Experience	Desire for Independence
	Understanding Processes		General Business Experience	Locus of Control
	Evaluating Information Accurately		Functional Experience	Self-Efficacy
			Industry Experience	Overconfidence
			Start-up Experience	Intuition
			Having a Role-Model	

THE ENVIRONMENTAL FRAMEWORK

Economic Factors	Political Factors	Industry Factors	Demographic Factors	Cultural Factors
Stable Economic Conditions	Rule of Law & Property Rights	R&D Intensity, Technological Development	Population Growth	Social Acceptance of Entrepreneurship
Economic Growth	Macroeconomic Policies	Locus of Innovation	Population Density & Urbanization	Attitudes toward failure & bankruptcy
Wage Rates	Licensing & Bankruptcy	Strength of Patents	Immigration & Population Mobility	Competitiveness
Income Disparity	Deregulation	Market Size	Educational Infrastructure	Bureaucracy & Corruption
Capital Availability	Resource Policies	Market Growth		Tradition
Taxation	Sectoral Policies	Market Segmentation		Social Capital
	Decentralization of Power	Industry Structure		Power Distance (PDI)
		Industry Age		Uncertainty Avoidance (UAI)
		Dominant Design		Masculinity (MAS)
		Industry Concentration		Individualism (IDV)
		Profitability		
		Cost of Inputs		
		Capital Intensity		
		Advertising Intensity		
		Firm Size		

Sources: (Hofstede et al., 2004; Lorentzen, 2007; Shane, 2003; Storey, 1999; Verheul et al., 2001)

Relying on the above framework, we learn that from an individual perspective, strengthening individual resources not only strengthens the capabilities of a society but also encourages more lasting forms of entrepreneurship (Shane, 2008). For example, on the individual level, increasing the opportunity to have an education (the higher the better), connect with other entrepreneurs, having had entrepreneurial role-models, having many different career experiences with a deepened knowledge of one industry and having had start-up experience influences the volume and success of new venture creation. Personal capability factors are strengthened by psychological factors such as the willingness to take risks, being able to categorize information, having an internal locus of control, etc.

Examining the individual without considering his environmental context is an incomplete intellectual exercise. Therefore, the framework breaks down the environmental context into economic, political, industrial, demographic and cultural conditions. Some of the conditions supporting entrepreneurial opportunity discovery and exploitation are, for example, economic stability with a transparent rule of law as integral aspects of robust entrepreneurial action. Industry conditions that have a high level of R&D intensity or are service oriented tend to be breeding grounds for entrepreneurial endeavors. Demographic conditions like high population density and urbanization tend to support resource collection, the availability of diverse information and knowledge, and larger networks with more structural holes. Cultural conditions with more acceptance of risk taking behavior and failure tend to have more entrepreneurs.

The framework in Table 9 is used as an organizing device to develop the questions related to my empirical work and to examine the entrepreneurial process through the subjective narratives of entrepreneurs in a resource-poor environment in a forthcoming paper.

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